



US00550131A

United States Patent [19]
Baumgartner et al.

[11] **Patent Number:** **5,350,131**
[45] **Date of Patent:** **Sep. 27, 1994**

- [54] **FISHING REELS WITH A SPOOL RECEIVING THE FISHING LINE**
- [75] **Inventors:** **Walter Baumgartner, Theilenhofen; Dieter Hamann, Gunzenhausen, both of Fed. Rep. of Germany**
- [73] **Assignee:** **D.A.M. Deutsche Angelgerate Manufaktur Hellmuth Kuntze GmbH & Co. KG, Fed. Rep. of Germany**
- [21] **Appl. No.:** **788,801**
- [22] **Filed:** **Nov. 7, 1991**
- [30] **Foreign Application Priority Data**
Nov. 10, 1990 [DE] Fed. Rep. of Germany 4035846
- [51] **Int. Cl.⁵** **A01K 89/015**
- [52] **U.S. Cl.** **242/242; 242/43 R**
- [58] **Field of Search** **242/158.1, 158.5, 43 R, 242/241, 242**

- 7007657 3/1970 Fed. Rep. of Germany .
- 3417716 11/1985 Fed. Rep. of Germany 242/43 R
- 2264480 10/1975 France 242/242
- 694177 9/1965 Italy 242/242
- 0006497 2/1974 Japan 242/43 R
- 9867/87 5/1989 Rep. of Korea .
- 4027/90 5/1990 Rep. of Korea .

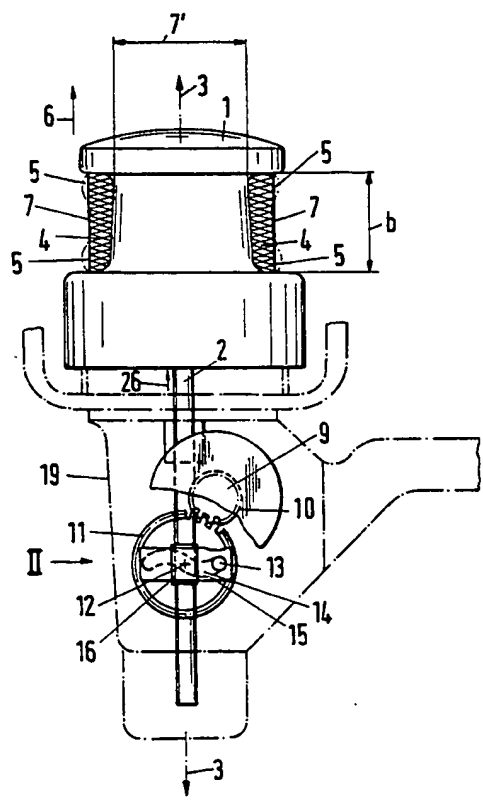
Primary Examiner—Katherine Matecki
Attorney, Agent, or Firm—Bacon & Thomas

[57] **ABSTRACT**

In a fishing reel of the type in which the spool for receiving the fishing line is caused to move to and fro in the direction of its winding axis in response to a cam drive for driving a spindle attached to the spool, the cam drive including a guide part with a guide slot into which projects an eccentrically mounted cam stud, the guide slot is in the form of an elongated S in order to impart an acceleration to the spool at its reversing points, and thereby prevent formation of bulges at the sides of the spool during winding. The locations in the guide slot corresponding to reversing points of the spool are offset from a center line of the guide slots along a longitudinal axis of the slot in a direction perpendicular to the stroke direction, resulting in the above-described acceleration and also having the effect of increasing displacement of the cam drive mechanism in the stroke direction.

- [56] **References Cited**
U.S. PATENT DOCUMENTS
2,724,563 11/1955 Shakespeare et al. 242/242
4,191,343 3/1980 Morishita 242/242
5,143,318 9/1992 Tipton et al. 242/241
- FOREIGN PATENT DOCUMENTS**
917518 1/1954 Fed. Rep. of Germany .
944828 6/1956 Fed. Rep. of Germany 242/242
7006743 2/1970 Fed. Rep. of Germany .

6 Claims, 5 Drawing Sheets



00788801-10000000